

Subtracting Mixed Numbers

R 4-6

To subtract mixed numbers, the fractional parts must have the same denominator.

	Step 1	Step 2	Step 3
Find $9\frac{1}{12} - 4\frac{5}{8}$.	<p>Estimate. $9 - 4 = 5$</p> <p>Write equivalent fractions for the LCD.</p> $\begin{array}{r} 9\frac{1}{12} = 9\frac{2}{24} \\ -4\frac{5}{8} = -4\frac{15}{24} \\ \hline \end{array}$	<p>Before you can subtract, rename $9\frac{2}{24}$ to show more twenty-fourths.</p> $\begin{array}{r} 9\frac{2}{24} = 8 + \frac{24}{24} + \frac{2}{24} = 8\frac{26}{24} \\ -4\frac{15}{24} \\ \hline \end{array}$	<p>Subtract and simplify if possible.</p> $\begin{array}{r} 8\frac{26}{24} \\ -4\frac{15}{24} \\ \hline 4\frac{11}{24} \end{array}$
Find $10 - 4\frac{2}{5}$.	<p>There is no fraction from which to subtract $\frac{2}{5}$.</p>	<p>Rename 10 to show fifths.</p> $10 = 9 + \frac{5}{5} = 9\frac{5}{5}$	<p>Subtract. Simplify if possible.</p> $\begin{array}{r} 9\frac{5}{5} \\ -4\frac{2}{5} \\ \hline 5\frac{3}{5} \end{array}$

Find each difference. Simplify if possible.

1. $5\frac{9}{10} - 2\frac{3}{5} =$ _____ 2. $11\frac{7}{16} - 8\frac{3}{8} =$ _____ 3. $9\frac{2}{3} - 9\frac{1}{6} =$ _____

4. $4\frac{2}{3} - 2 =$ _____ 5. $4\frac{1}{4} - \frac{7}{12} =$ _____ 6. $5\frac{6}{7} - 2\frac{13}{14} =$ _____

7. Number Sense How do you know if you need to rename the first number in a subtraction problem involving mixed numbers?
